Buildings Technology Research and Development Subcommittee Meeting

January 20, 2011

Location: 950 L'Enfant Plaza DOE
Time: 1:30-3:30 p.m.

Attendees[1]	Agency/Office	
Shyam Sunder	DOC/NIST	BTRD Co-chair
Roland Risser	DOE/EE-Buildings	BTRD Co-chair
Kevin Hurst	EOP/OSTP	
Steve Bushby	DOC/NIST	
Paul Domich	DOC/NIST	BTRD Ex-Sec
Nick Sinai	DOC/NIST	
George Hernandez	DOE/EE-Buildings/PNL	
Bill Brodt	NASA	
Diane Stewart (telephone)	HHS	
Ted Kozak	HHS	
Dana Bres	HUD	
Chris Weber	STPI	
Judith Heerwagen	GSA	
Joni Teter	GSA	
Kinga Porst	GSA	
Jerome Lam	GSA/on detail from DOE	
TBD (telephone)	ERDC USACE	
TBD (telephone)	Smithsonian	
TBD (telephone)	Smithsonian	
Y. Grace Hsuan	NSF	
Amber Van Amburg	GSA	
Echton English	NSA	
Marty Savoy	USACE	

Next Meeting: March 17, 2011 1:30 - 3:30 PM, 950 L'Enfant Plaza DOE

Meeting Calendar:

March 17, 2011	August 18, 2011
April 21, 2011	September 15, 2011
May 19, 2011	October 13, 2011
June 16, 2011	November 17, 2011
July 21, 2011	December 15, 2011

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[1] Active Members not attending identified in light gray

Introductions: BTRD Co-Chair, Shyam Sunder (NIST) opened the monthly meeting of the Subcommittee for Buildings Technology Research and Development (BTRD) welcoming the agency representatives and thanking them for their participation. All participants provided self-introductions.

Review of Minutes: Members reviewed the December 16, 2010 BTRD Minutes prior to the start of the meeting.

BTRD 2011 Activities: Sunder opened the discussion of future planned BTRD activities by recapping the OSTP priorities established for the Subcommittee. The submetering is complete and under OSTP review. The commercial buildings energy data initiative lead by OSTP and supported by CEQ is moving forward. The Subcommittee will be supporting the activities of the data initiative.

The goal of the initiative is identify new and better ways to leverage building energy data. Building data, both for residential and commercial buildings, allows the owner/operator with the ability to: better monitor and track building performance, compare performance results with similar buildings, affect occupant energy use behaviors, and interact with the smart grid.

The BTRD proposed activity of identifying or requiring detailed submetering data for use in improved evaluation of building and system performance can be performed in parallel with the building energy data collection initiative. The group was challenged to identify the role the federal government and the BTRD have in advancing the use of meters, submeters, smart building technologies, and energy upgrades. Do data standards or other infrastructure elements that need to be established to help the owner/operator in improving their energy use? Building energy data for new designs is easier to access and use than for existing buildings with old or no existing energy data infrastructure.

The proposed Building Energy Data Roundtable will help develop a vision for how building energy data can and will be used. The discussion will include utility data, operational data, and smart grid data. Issues will include data standards and also privacy standards and protections. Prior to the Roundtable, the planning group should 1) decide on a reason set of actionable goals for the meeting, 2) determine appropriate invitees, and 3) frame-up the desired outcomes.

Dana Bres mentioned that building energy data is available through HUD for residential buildings. Other agencies may also be collecting similar data and need to be identified. Other federal pilot projects will be identified during the Roundtable that will aid in developing submetering case study data.

Building Energy Data Initiative: Nick Sinai (NIST) summarized the policy framework around the Building Energy Data Initiative. Three policy "levers" drive the value proposition for building product developers and building owners. These include consensus-driven standards, an open data architecture, and pre-

competitive R&D collaboration. Other technology sectors, e.g., broadband, have experience rapid and prolific growth in capabilities and private sector involvement. Application development for small handheld "smart" devices is transforming how these devices are used and clouding the differences between these devices and the use of laptop computers. A similar type of transformation is desired for building technologies.

Product offerings (seen at GreenBuild 2010) include small and inexpensive options for building instrumentation. Interoperability of systems and devices remains a challenge to implementation. Data standards and open data formats will facilitate development of new technologies and the introduction of new features in existing appliances (e.g., power monitors for IT server systems). The private sector can define the uses while the federal government can establish the framework and infrastructure needed to support their adoption. Pilot and demonstration projects by the federal agencies will also facilitate accelerated adoption.

Action Item: A "select" working group will organize the Roundtable activity. BTRD members include: Steve Bushby (NIST), Kinga Porst (GSA), George Hernandez (DOE), Chris Weber (STPI), Paul Domich (NIST), and Nick Sinai.

Closure: Sunder thanked the participants for the contributions and the meeting adjourned at 3:30pm.